# NJDOT Bureau of Research QUARTERLY PROGRESS REPORT

Project Title:	Work Zone Intrusion Alarm Effectiveness				
RFP NUMBER: 7212680		NJDOT RESEARCH PROJECT MANAGER: Ed Kondrath			
TASK ORDER NUMBER: 16		PRINCIPAL INVESTIGATOR: Cathy Krupa			
Project Starting Date: 3/10/2010 Project Ending Date: 9/9/2010		Period Starting Date: 1/1/2010 Period Ending Date: 3/31/2010			

Task	% of	Total	% of	Cost This	% of	Total Cost
	Total	Budget	Task	Quarter	Task to	to Date
	Project		This		Date	
	Budget		Quarter			
1. Study Design	21.5%	\$7,749	37%	\$2,886	37%	\$2,886
2. Information	41.3%	\$14,909	0%	\$0	0%	\$0
Collection						
3. Synthesis and Final	37.2%	\$13,418	0%	\$0	0%	\$0
Report						
TOTAL	100%	\$36,076				\$2,886

## **Project Objectives:**

The objectives of this project are to:

- 1. Evaluate the acceptance of the SonoBlaster® Work Zone Intrusion Alarm by NJDOT maintenance workers and its effectiveness in protecting the workers from injury caused by errant vehicles that breach the work zone.
- 2. Prepare a final report summarizing the research conducted.

#### **Project Abstract:**

Workers in highway work zones routinely face dangerous situations that cause serious injuries and fatalities. In order to reduce the incidence of and potential for fatalities/injuries at highway construction and maintenance sites, jurisdictions have deployed safety devices and systems to safeguard employees. One of the potential safety approaches is the use of intrusion alarms, which are designed to protect workers from injury caused by errant vehicles that breach the work zone. The NJDOT will deploy the SonoBlaster® Work Zone Intrusion Alarm on routine highway maintenance projects on a trial basis. To determine the acceptance and effectiveness of this device, a study design featuring field observations and in-person group and individual interviews focused on multiple maintenance crews will be employed. The final report will summarize the research conducted for this task order and present conclusions about future SonoBlaster® deployments in New Jersey.

## 1. Progress This Quarter by Task:

#### Task 1:

- Contacted FHWA Work Zone Team and one state that has used the SonoBlaster®; and
- Developed draft field and interview guides.

#### Task 2:

• No activity.

#### Task 3:

• No activity.

### 2. Proposed Activities for Next Quarter by Task:

#### Task 1:

- Complete brief interviews with two states that have used the SonoBlaster®;
- Finalize field and interview guides;
- Finalize schedules for conducting field observations and interviews; and
- Participate in project review meeting and complete progress reports.

#### Task 2:

- Conduct field observations;
- Conduct group interviews; and
- Conduct individual interviews.

#### Task 3:

- Complete draft final report; and
- Present draft final report at a briefing for NJDOT.
- Final report incorporating NJDOT feedback also may be completed during the next quarter depending on the timing and duration of the review cycle.

# 3. List of Deliverables Provided in This Quarter by Task (product date):

- Task 1. Contacts with two states that have used the SonoBlaster®; and
- Task 1. Draft field and interview guides.

## 4. Progress on Implementation and Training Activities:

• No work on implementation or training in this period.

### 5. Problems/Proposed Solutions:

• No problems identified for this period.

Total Project Budget	\$36,076.12
Contract Amount:	\$36,076.12
Total Project Expenditure to date	\$2,885.52
% of Total Project Budget Expended	8%